

RHIC BPM Position Calculation

This information was culled from airv509.c and calv25d.c
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coeff	definition
=====	=====
c0	polarity (0=positive, 1=negative)
c1	A gain (always 1)
c2	A offset
c3	not used
c4	B offset
c5	position linearization coefficient
c6	position linearization coefficient
c7	position linearization coefficient (always 0)
c8	B gain numerator
c9	B gain denominator
c10	PDG 1 operational value
c11	PDG 2 operational value

```
    acor =      c1 * (c2+amod)
    bcor = (c8/c9) * (c4+bmod)
    ratio = (acor-bcor) / (acor+bcor)
position = (c5*ratio) + (c6*ratio^3) + c7
```

BPM Type	c5	c6	c7
=====	=====	=====	=====
1	25,734	9,564	0
2	25,778	8,577	0
3	38,629	13,118	0